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(54) **METHOD FOR PLASMA PROCESSING BY SHAPING AN INDUCED ELECTRIC FIELD**

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(*) **Notice:** This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(58) **Field of Search** 427/569, 576, 427/577, 460, 571

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7 Claims, 14 Drawing Sheets

(57) **ABSTRACT**

A method for achieving a highly uniform plasma density on a substrate by shaping an induced electric field including the steps of positioning the substrate in a processing chamber, supplying a high frequency power to a spiral antenna generating an induced electric field in the processing chamber, generating a plasma in the processing chamber, and shaping the electric field with respect to the substrate to achieve a uniform distribution of plasma on the substrate being processed.

